

AUTOMATED RECOVERY FROM DATA CORRUPTION OF DATA VOLUMES IN RAID STORAGE

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ABSTRACT OF THE DISCLOSURE

[0039] The present invention relates to an apparatus or computer executable method of detecting corrupt data in a RAID data storage system before the corrupted data is provided to a computer system coupled to the RAID data storage system. In one embodiment of the invention, the process of detecting corrupt data begins when a request to read data is received from a computer system in data communication with the RAID data storage system. The requested data is stored in a stripe unit of the RAID data storage system. New parity data is generated as a function of the stripe unit data in response to receiving the request. This newly generated parity data is compared with existing parity data stored in the RAID data storage system. The existing and newly generated parity data are generated using the same algorithm. If the existing and newly generated parity data do not compare equally, the data of the stripe unit is considered corrupt and should not be returned to the computer system.